APPENDIX IV

POLICY ISSUES

Appendix IV contains the Next Generation Air Transportation System (NextGen) Policy Issues in numerical order. Policy Issues are intended to encourage targeted stakeholder engagement in solving policy challenges that may impede progress toward NextGen operational improvements. More mature issues may call for specific policy decisions or courses of action. Less mature issues may require further analysis and open discussion before specific decisions or courses of action can be recommended.

Each listing displays the following information for each Policy Issue:

- **Policy Issue Description:** The Policy Issue description defines the issues and desired results of policy deliberations and actions that will support an improved level of performance or specific capability of NextGen operations.
- **Suggested Office of Primary Responsibility (SOPR):** The suggested Partner that will have primary responsibility for this Policy Issue.
- **Suggested Office of Collateral Responsibility (SOCR):** The suggested Partner (s) that will collaborate with the SOPR to achieve the Policy Issue.
- **Initial Decision:** This indicates the earliest date by which a policy decision must be made, at least in part, in order to support a dependent Enabler or OI. Many Policy Issues will require a series of actions or agreements, each successively informed by the earlier ones; therefore, "Initial Decisions" are the first significant decision in moving toward a resolution.
- **Primary Supported OIs:** This lists OIs that are dependent upon this policy's initial decision or follow-on decisions.
- **Primary Supported Enablers:** This lists Enablers that are dependent upon this policy's initial decision or follow-on decisions.

Complete information on IWP planning elements is available in the interactive Joint Planning Environment (JPE). The JPE is available at www.jpdo.gov.

Policy Issues

PI-0001 Airport Operation Centers (AOC) Equipage Implementation Policy

Description: Airport Operation Centers (AOCs) and other users of Four-Dimensional Trajectory (4DT) flight plans must utilize flight planning systems that provide the necessary 4DT data in a form acceptable by Air Navigation Service Providers (ANSP) automation systems. Policies should be developed to determine if operational incentives, economic incentives (e.g., tax credits) or mandates be employed to promote AOC equipage of NextGen technologies. Objective criteria should define when voluntary incentives are abandoned in favor of mandates.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs: OI-0360

Primary Supported Enablers: EN-0002, EN-0008, EN-0037, EN-0036, EN-0005, EN-0006

PI-0002 NextGen Facilities

Description: As the transition to dynamic airspace management and the use of Net-Centric Operations (NCO) is realized under NextGen, certain Federal Aviation Administration (FAA) facilities may no longer be cost-effective and efficient. Analysis must be performed to determine facility cost/benefit effectiveness and mechanisms must be developed that allow optimum facility configuration.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2015

Primary Supported OIs: OI-0361

Primary Supported Enablers:

PI-0004 ATM Automation Development, Performance and Interoperability Standards

Description: Avionics and ground system automation software use very different certification/approval processes and are not well coordinated. NextGen automation systems will rely heavily on software that is very complex, interoperable with avionics and often safety critical. Avionics development follows strict standards and certification/approval processes (e.g., DO-178b). Failure to create comparable and coordinated development/certification processes for ground automation will result in increased safety risk and implementation delays, and will dilute avionics performance gains. Policies should be developed to set performance standards and processes for ground systems (hardware and software) similar to those used for avionics, and to ensure an equivalent level of safety across ground and airborne elements.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs: OI-0326, OI-0338, OI-0402, OI-0403, OI-0343

Primary Supported Enablers: EN-3054, EN-0020, EN-0021, EN-0026, EN-0110, EN-0034, EN-0038, EN-0009, EN-0006

PI-0005 Public Acceptance of Automation

Description: Policy questions need to be examined in the area of the public acceptance of automation. Will complete reliance on automation be acceptable to the public? If not, what level of human involvement is required?

SOPR: Industry ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs:

Primary Supported Enablers: EN-0021, EN-0023, EN-0016, EN-0018, EN-0038, EN-0009, EN-0106, EN-0032, EN-0039

Policy Issues

PI-0006 Balance of Human vs. Automation

Description: Policies should be explored to determine the balance and trade-offs between automation and human participation in traffic management. Improper allocation of functions between automation and human can decrease efficiency, decrease effectiveness, and decrease safety. Additionally, placing too much reliance on aircraft systems or ground systems will increase costs and risks for operators or Air Navigation Service Providers (ANSPs), respectively.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs: OI-0360, OI-0362, OI-0322

Primary Supported Enablers: EN-0016, EN-0023, EN-0019, EN-0021

PI-0007 Rules of the Road

Description: In order to provide operational benefits/incentives, there will be times when priority access to airspace and runways will need to be given to aircraft with NextGen equipment. Policies must be in place to define those priorities and when they are applied. Air Traffic Management (ATM) automation software logic will need to reflect those policies.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2018

Primary Supported OIs: OI-0358, OI-0362, OI-0348

Primary Supported Enablers: EN-0018

PI-0008 General Aviation Benefits

Description: The NextGen system has the potential to provide the General Aviation (GA) community with many benefits that will encourage equipage. However, there must be a conscious and deliberate effort to structure NextGen policies to address the needs all of stakeholders. Potential GA benefits include no-fee data link weather and airspace status information, Visual Flight Rule (VFR) and Instrument Flight Rules (IFR) transition routes through large terminal areas, and greater access to Special Use Airspace (SUA). These benefits require supporting policy decisions by the Federal Aviation Administration (FAA) and Department of Defense (DOD) to make those benefits a priority. (e.g., Any terminal airspace redesign must incorporate transition routes, real-time SUA management, and SUA access when not being used.)

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs: OI-0346, OI-0310, OI-0311

Primary Supported Enablers:

PI-0009 National Integrated Surveillance Plan

Description: Policies are needed to define the security levels, criteria and approval processes that will guide the sharing of complementary cooperative and non-cooperative surveillance data among public and private entities. These should address content attributes such as accuracy, timeliness, identification and authorization. At a minimum, Department of Defense (DOD), Department of Homeland Security (DHS), Department of Transportation / Federal Aviation Administration (DOT/FAA) and operators must collaborate on policies regarding the collection and distribution of surveillance data and requirements for data security, network security and access requirements. Associated policies must then be developed to ensure that each user is able to access complete, accurate and timely surveillance information to satisfy their operational requirements.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs: OI-4511, OI-4520, OI-4500

Primary Supported Enablers: EN-4201, EN-4512, EN-4522, EN-1006, EN-1402, EN-4520, EN-1251, EN-4202, EN-4500, EN-1049, EN-1002, EN-1003, EN-1023, EN-1006, EN-1510, EN-1401, EN-4203, EN-4521, EN-1400

Policy Issues

PI-0010 National Surveillance Strategy

Description: Develop a coordinated national surveillance decision among Joint Planning and Development Office (JPDO) partner agencies to comprehensively address the functional requirements and financial responsibilities of provision/use of surveillance equipment/services. Independent agency efforts to address respective surveillance needs of Department of Homeland Security (DHS), Department of Defense (DOD), and Department of Transportation/Federal Aviation Administration (DOT/FAA) may be inefficient functionally and financially. Given the FAA decision to implement a space-based cooperative surveillance technology (i.e., Automatic Dependent Surveillance-Broadcast (ADS-B)), this policy must address the extent to which future non-cooperative surveillance will be needed to address cooperative surveillance system failures and whether DHS/DOD's planned non-cooperative architecture will satisfy Air Traffic Management (ATM) performance requirements during such failures. Addressing this question requires FAA to articulate the complementary surveillance thresholds and DOD/DHS/DOC's collaboration on accounting for the thresholds in any future development.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2009

Primary Supported OIs: OI-4500, OI-4512, OI-4521

Primary Supported Enablers: EN-1002, EN-1401, EN-1405, EN-1006, EN-1023, EN-1400, EN-1400

PI-0012 Surveillance - Global Harmonization

Description: Develop streamlined US and international regulatory/policy coordination, through the International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, to assure international acceptance of processes and standards for sharing surveillance data (cooperative and non-cooperative) with neighboring countries / Flight Information Regions (FIRs), including security controls. Moreover, develop policies to guide the development of standards and compatibility requirements for ground/air and non-cooperative surveillance equipment. This is meant to address foreign aircraft flying inside the National Airspace System (NAS) as well as domestic aircraft exiting the NAS.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs: OI-0353, OI-0354

Primary Supported Enablers: EN-1003, EN-1006, EN-1023, EN-1049, EN-1002

PI-0014 Aircraft Equipage Implementation Policy

Description: Policies have to be explored to determine if operational incentives, economic incentives (e.g., tax credits) or mandates should be employed to promote aircraft equipage of specific NextGen avionics technologies that will be necessary to achieve improved performance and safety in the National Airspace System (NAS). Objective criteria should define when voluntary incentives are abandoned in favor of mandates. Moreover, aircraft equipage policy must incorporate US and international regulatory/policy coordination, through the International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, to harmonize regulations/policies related to standards and compatibility requirements for avionics equipment, and to determine application of US air carrier equipage standards to foreign-based air carriers that enter US airspace. This should address foreign aircraft flying inside the National Airspace System (NAS) and domestic aircraft exiting the NAS.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2009

Primary Supported OIs: OI-0358, OI-0339, OI-0322, OI-0344, OI-0348, OI-0311, OI-0316

Primary Supported Enablers: EN-0204, EN-1202, EN-0028, EN-0102, EN-1500, EN-0101, EN-0201, EN-0200, EN-1023, EN-1007, EN-0031, EN-0106, EN-0103, EN-0109, EN-0032, EN-6008, EN-1400

Policy Issues

PI-0017 Communications Architecture Plan for Ground, Space, Airborne, and/or Performance-Based Architectures

Description: Policies should be developed to define a strategy for communications services to ensure that performance and avionics standards will be in place when needed for ground-based, space-based, airborne-based, and/or performance-based architectures. This should include a decision on whether an "airborne internet" approach is used.

SOPR: DOD ***SOCR:*** ***Initial Decision:*** 2009

Primary Supported OIs: OI-0358, OI-0344, OI-0362, OI-0321, OI-0327

Primary Supported Enablers: EN-1204, EN-1010, EN-1037, EN-1203, EN-1205, EN-1061

PI-0021 Protection of Data Shared Over-The-Air

Description: Policies must be developed to protect access to Over-the-Air Automatic Dependent Surveillance-Broadcast (ADS-B) and Data Communications (DataComm) information to prevent unauthorized use of data (e.g., unauthorized tracking of ADS-B identification and to deter "phantom controllers"). For example, ADS-B currently transmits a unique International Civil Aviation Organization (ICAO) code assigned by the Federal Aviation Administration (FAA) to each aircraft. This unique code is currently matched to the aircraft registration number practice that ICAO discourages for privacy reasons. The FAA has also made this information accessible to the public via the web. This policy must change or ADS-B standards and avionics must be modified to transmit encrypted information. The FAA should better utilize non-cooperative surveillance systems, beyond homeland security purposes, to address the vulnerabilities of cooperative Air Traffic Management (ATM) surveillance systems.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2009

Primary Supported OIs:

Primary Supported Enablers: EN-4601, EN-1003, EN-1201, EN-1023, EN-1400, EN-1203, EN-1205, EN-5004, EN-1224, EN-1204

PI-0022 GPS Policy to Support Civil NextGen PNT Requirements

Description: A great deal of reliance is being placed on the Global Positioning System (GPS) for NextGen Positioning, Navigation, and Timing (PNT) services for, Communications, Navigation, and Surveillance (CNS). The GPS system may not meet civil requirements. Current Department of Defense (DOD) minimum GPS performance guarantees do not provide sufficient performance to meet civil requirements, without augmentation. Despite actual, demonstrated performance that exceeds the current commitment; civil reliance on the system can only rely on the USG commitment specified in the GPS standard performance service specification. Policies should be reviewed to ensure that GPS performance guarantees support requirements in a cost-effective manner for both service provider and user. Reliance on foreign Global Navigation Satellite System (GNSS) should be considered as part of this review (see PI-0075).

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs: OI-0347, OI-0353, OI-0359, OI-0362, OI-0363, OI-0322, OI-0327

Primary Supported Enablers: EN-1400, EN-1007, EN-1023, EN-0035

Policy Issues

PI-0024 Secure Information Exchange

Description: 1) Develop policies to define (an) organization(s) that will maintain overall "ownership" of the central information repository for aviation information. 2) Develop policies to address handling archived data to protect privacy and proprietary information; establish mechanisms for protecting competitive information; create an oversight body with jurisdiction and responsibility over stakeholder data; and delegate certification responsibility. 3) Develop streamlined US and international regulatory/policy coordination, through International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, related to secure information exchange of aviation related information, including access rules and governance. Secure exchange of information includes access controls, trust relationships, associated policies and mechanisms to provide appropriate access to information by authenticated Community of Interest (COI) users. The requirement for purity of COI information may be founded legally, by proprietary preference, or through civil liberties concerns and policies. Top Secret, Secret, Controlled but Unclassified, and industry proprietary information must remain protected in the net-centric NextGen. Cross-domain (e.g., Multi-Level Security Exchange/Gateway Capability) secure communication is a critical feature of data availability. The NextGen unclassified Mobile Routing and Domain Network Services operated by the Federal Aviation Administration (FAA) may be considered as the "root" domain to which the other domains will connect. The originating domain has the responsibility to establish policies to protect the interests of all interconnected domains and negotiate interconnection agreements. The policy domains constituting NextGen include, but are not necessarily limited to, the following: FAA, Department of Defense (DOD), Department of Commerce (DOC), Department of Justice (DOJ), Department of Homeland Security (DHS), National Aeronautic and Space Administration (NASA); state, local, and tribal law enforcement and emergency responders; airline operating companies; General Aviation (GA) facilities; commercial air traffic communication providers; foreign civil aviation authorities and ICAO.

SOPR: DOD ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs: OI-0331, OI-0358, OI-0346, OI-5009, OI-5011, OI-0320

Primary Supported Enablers: EN-3016, EN-3018, EN-4210, EN-1015, EN-1016, EN-0002, EN-2230, EN-2240, EN-2260, EN-3036, EN-4203, EN-3119, EN-1043, EN-0005, EN-0006

PI-0030 Safety Management Requirements

Description: Predicted significant growth and increased complexity in the air transportation system will require safety improvements to achieve a significant reduction in accidents. This objective will be achieved by NextGen safety programs that, in addition to today's post-accident investigation approach, will include proactive identification of accident precursors and community-wide implementation of measures based on the Safety Management Standard (SMS). This policy is needed because there is no existing policy or directive requiring Federal government-wide adherence to a national aviation safety standard. Historically, each Federal department or agency ultimately responsible for developing its own policies, rules, standards, and architectures related to the safety of its own aviation operations. New policy is needed to secure agreement between NextGen agencies to implement the National Safety Management System (SMS) Standard within their own organizations and in their constituent entities.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs:

Primary Supported Enablers: EN-3018

PI-0031 Safety National Leadership Organization

Description: Currently policies and directives do not require federal government-wide adherence to a national aviation safety standard. Each agency has developed and enforces its own policies, rules, standards, and architectures related to safety of its aviation operations. A national aviation leadership organization will enable and support implementation of government-wide safety information and analysis, and proactive safety risk identification management. New policy is needed to secure agreement of NextGen agencies to implement a governance entity through which compliance with national safety management requirements will be monitored and assured.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs:

Primary Supported Enablers: EN-3036, EN-3120, EN-3018

Policy Issues

PI-0032 Government-Wide Safety Information Sharing

Description: Policy is needed to enable implementation of the envisioned NextGen Aviation Safety Information Analysis and Sharing (ASIAS) environment, which is based on government-wide information sharing. ASIAS will support a shift from the current historic (accident) analysis to diagnostic and prognostic analyses that use system-wide safety information sources. This policy is needed because, although examples of limited bilateral safety information sharing are occurring today, no Federal government-wide policy or agreement exists to ensure that aviation safety information will be shared. Historically, each agency has developed its own policies, rules, standards, architectures and systems to channel information to meet specific aviation safety mission requirements, and there is little or no connectivity among the various safety information regimes. New policy is needed to secure NextGen agencies agreement to share aviation safety information, with necessary protections for sensitive, confidential and proprietary information.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs:

Primary Supported Enablers: EN-3120, EN-3036

PI-0033 National Aviation Safety Strategic Plan (NASSP)

Description: Vision 100 charges the Joint Planning and Development Office (JPDO) with creating a national vision for an Air Transportation System (ATS) capable of meeting the traffic demands of 2025, developing a multi-agency roadmap to NextGen, and coordinating related research activities within the Federal Government with United States (US) aviation and aeronautical firms. This policy is needed because no national-level aviation strategic plan exists that sets goals, priorities, and roles and responsibilities for aviation safety. The benefits of this policy will be common safety vision, goals, and metrics; coordinated, leveraged Research and Development (R&D) and investments; robust national safety information analysis/sharing capability; prognostic approach to hazard identification and mitigation; safety built into systems and operations; consistent procedures/practices/requirements that facilitate safe intermodal interfaces and international harmonization. New policy is needed to institutionalize acceptance by NextGen agencies of a jointly developed national plan to promote continuous improvement of aviation safety and the sharing of research and safety-relevant information.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs:

Primary Supported Enablers: EN-3018

PI-0036 Airport Advocacy Program

Description: Community understanding and support for critical airports is enhanced through outreach programs and best management practices. A diverse network of airports must be preserved throughout the nation in the best interest of an efficient national Air Transportation System (ATS). This includes all types of airports, including Commercial Service and General Aviation (GA) airports. The sustainability of existing airports is critical to the future growth of communities and to the nation's air transportation system. Within NextGen, increased use of Small Hub, Non-Hub, Non-Primary, GA and Reliever airports is envisioned as a critical component to increasing total system capacity and thereby accommodating up to a threefold increase in operations. However, lack of support and understanding from communities and municipalities that often own the airports and/or control land that surrounds the airports is a major barrier to increasing and even maintaining capacity. Accordingly, a policy is needed to define and fund a Federal airport advocacy and sponsorship program aimed at helping airport operators, municipalities, local businesses, users and the community to understand the importance of long-term airport preservation and capacity enhancements. In addition to airport advocacy and fostering community support for airports, the program would seek to align Federal airport programs toward the goal of long-term airport preservation.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs: OI-5004, OI-5005

Primary Supported Enablers: EN-5000

Policy Issues

PI-0037 Airport-Compatible Land Use

Description: Incompatible land-use planning in areas surrounding airports results in decreased operational flexibility and therefore reduced airport capacity. Land-use decisions are made by state and local jurisdictions and the Federal government has a limited ability to influence the outcome of these decisions. Effective, comprehensive land use controls are needed to protect critical secondary airports from encroachment of land uses that are non-compatible with airport operations, thus improving the sustainability and growth potential of the airport. Additionally, the land use controls will serve to protect nearby residents from negative effects (e.g., noise). Policies should be explored that will encourage airports and surrounding communities to regulate land use near airports in order to accommodate growth in airport capacity consistent with national aviation needs.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs: OI-5004, OI-5005

Primary Supported Enablers: EN-5001

PI-0038 Small-Hub, Non-Hub, Non-Primary, General Aviation and Reliever Airport Finance

Description: A determination must be made as to whether small hub, non-hub, reliever, and General Aviation (GA) airports could help to relieve congestion at larger airports and thus help accommodate the increased traffic envisioned by NextGen. If they could help, policies should be adopted to ensure sufficient and sustainable funding for the development of these secondary airports to accommodate the needs of NextGen.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs: OI-5000

Primary Supported Enablers:

PI-0039 Hazards to Air Navigation Enforcement Policy

Description: When the Federal Aviation Administration's (FAA's) evaluation of a tower, tall building, or other structure leads to a hazard determination under Part 77, the FAA must rely on local governments with land use authority to prevent the structure from being built or to limit its height. The FAA does not have the power itself to do this. A far greater problem exists when the FAA determines that - while a proposed structure may not pose a safety hazard under Part 77 - it is considered to impact safety under Part 121, requiring airlines to modify operations to meet Part 121 requirements. This situation results in inefficient use of the airport, airspace and suboptimal operations for airlines and other operators. For this reason, the Part 77 analyses, Terminal Instrument Procedures (TERPS) surface analyses, and Part 121 safety determinations should be unified to prevent construction of structures that present safety hazards or adversely impact operations at an airport. A determination must be made on the degree of impact from hazards to air navigation to airport access and capacity, both currently and with NextGen technologies and flight procedures. If needed to protect public investments in airport access and capacity, a policy determination must be made as to whether the FAA should have broader enforcement options in this area in order to meet the needs of NextGen.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs: OI-5000

Primary Supported Enablers:

Policy Issues

PI-0044 Airport Land Banking

Description: With limited resources, projects to provide near-term safety, security or capacity benefits are often considered to be high priority projects. Although the Federal Aviation Administration (FAA) has the legal authority to fund land acquisition in anticipation of future needs, land banking is often a lower priority use of available Airport Improvement Program (AIP) funding given that land purchase for long-term, future airport development has distant and less certain benefits. Also, FAA's existing grant assurances on airport land disposal may have the effect of acting as a bar to land banking. This policy issue would examine 1) policy options to encourage local communities to adopt policies and practices that would facilitate the acquisition of land in anticipation of future airport needs, 2) changes to FAA land disposal requirements to aid in land banking efforts, and 3) whether Congress should be asked to increase funding to FAA in support of airport land banking initiatives.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs: OI-5004, OI-5005

Primary Supported Enablers:

PI-0045 Airport Ground Transportation Access

Description: Alternative ways of getting passengers to/from the airport will need to be considered as the demand increases. With limited resources, projects to increase safety, security, or enhance capacity are usually given greater priority than those intended to improve airport access. Federal laws and Federal Aviation Administration (FAA) regulations generally prohibit spending airport money for off-airport purposes, although Airport Implementation Plan (AIP) and Passenger Facility Charge (PFC) are available to fund airport access projects. Policy options should be explored for allowing the federal government a more pro-active role in supporting airport access initiatives. Policy options can include, but should not be limited to, increasing availability of funding for airport access improvements.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs: OI-5012, OI-5015

Primary Supported Enablers:

PI-0046 Role of the Federal Government in Airport Capacity Enhancements

Description: Studies indicate that as airspace capacity is increased, airport capacity will become a primary constraint on the future Air Transportation System (ATS). Currently, airport development and expansion are initiated at the State and local level. This has sometimes meant that airport capacity enhancement projects that would benefit the national aviation system are either not built or are delayed. The Federal Aviation Administration (FAA) is taking a pro-active role at the national level through Future Airport Capacity Task (FACT) studies to identify airports and regions that need additional capacity. FAA then works with the airports to identify mid- and long-term solutions. Policy options should be considered for determining the FAA's role in encouraging airport sponsors and communities to build airport capacity that is critical to the national aviation system. This would include exploring mechanisms to augment the role of the Federal government in enhancing airport capacity using, among other methods, national level planning and funding mechanisms. PI-0046 compliments the airport advocacy and preservation policies envisioned in PI-0036 and PI-0048, which seek to identify and evaluate mechanism's to enhance the FAA's authority to preserve the viability of existing public use airports.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs: OI-5000, OI-5004, OI-5005

Primary Supported Enablers:

Policy Issues

PI-0047 Role of Federal Government in Conversion of Former Military Air Bases to Civil Aviation Use

Description: The Federal Aviation Administration (FAA) currently strives to augment airport capacity and works with the Department of Defense (DOD) to transition military aviation facilities closed under the Base Realignment and Closure (BRAC) process to civil aviation use. However, these efforts are not always successful as some military air bases in capacity-constrained regions have been permanently closed rather than converted to civil aviation use. Policy options should be considered for providing Department of Transportation (DOT) and FAA with an enhanced role in advocating for the re-use of former military air bases to expand airport capacity in regions experiencing or expected to experience airport congestion.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs: OI-5002, OI-5003, OI-5004, OI-5005

Primary Supported Enablers: EN-5001

PI-0048 Airport Preservation

Description: A diverse network of airports must be preserved throughout the nation in the best interest of an efficient National Airspace System (NAS). However, many airports are at risk from encroachment or even closure. The Federal Aviation Administration (FAA) currently strives to maintain existing airport capacity through National Plan of Integrated Airport Systems (NPIAS) and grant assurances. However, these efforts are not always successful. While new airports have opened (primarily serving General Aviation [GA]), others have seen their operations constrained by local land use decisions and/or new obstacles that impact the flight paths to and from the airport. A few airports have even been closed and the land converted to non-aviation uses. In addition to the airport advocacy policies envisioned in PI-0036, policy options should be identified and evaluated to enhance the FAA's authority to preserve the viability of existing public use airports.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs: OI-5002, OI-5003, OI-5004, OI-5005

Primary Supported Enablers: EN-5001

PI-0065 Airspace Regulatory Changes - Global Harmonization

Description: Develop streamlined US and international regulatory/policy coordination, through International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, to harmonize and improve flexibility in modification of international regulations and policies related to airspace use. Develop streamlined US and international regulatory/policy changes to provide maximum flexibility and usability in the development of airspace, procedures, and capabilities within the operational airspace system. This should include alignment of domestic and international law, treaty obligations, and procedures to decouple geographic airspace and infrastructure constraints from aircraft operations and provide capacity managers the flexibility to leverage resources across facilities to match staffing to traffic demand. This could possibly employ Regulation by Performance.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs: OI-0337, OI-0351, OI-0361, OI-0350, OI-0303

Primary Supported Enablers:

Policy Issues

PI-0069 Congestion Management Program

Description: At airports where demand temporarily exceeds the available capacity or at airports where it is not possible to increase capacity to accommodate all the flights that seek to operate there, it should be decided whether temporary regulatory or market based mechanisms should be used to manage the congestion and prevent unreasonable delays that could ripple throughout the National Airspace System (NAS). If such approaches should be adopted, a further decision must be made as to the appropriate mechanisms to be used (e.g., flight caps, antitrust immunity for airline scheduling meetings, regulatory preferences, peak hour pricing, congestion fees, slot auctions, or some other approach); the appropriate entity that should be responsible for adopting them (e.g., airports, Department of Transportation [DOT] or Federal Aviation Administration [FAA]); and, in the case of market mechanisms, how the money raised from fees or auctions should be spent and who should decide where it is spent.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs: OI-5002, OI-5003

Primary Supported Enablers:

PI-0071 Defense System Standards - Global Harmonization

Description: Develop streamlined US and international regulatory/policy coordination, through International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, for applicable standards for aircraft defense systems and whether those standards should be uniform to all aircraft or tailored for each type of aircraft. NextGen Secure Aircraft Service increases the safety and security of aircraft in flight through a variety of hardware, software, personnel and procedural methods. The threats intended for mitigation include, but may not be limited to, hijacking/unauthorized diversion; internal explosive destruction; external attack; onboard Chemical, Biological, Radiological, Nuclear, and High Yield Explosive (CBRNE) or other attack of crew, passengers, or aircraft systems; aircraft use as a transport for CBRNE; or aircraft use as Weapons of Mass Destruction (WMD). Certain types of aircraft may have different propensity for security breaches than others (i.e., more or less vulnerable to different threat types). In order to accurately mitigate these threats, it must be decided whether different aircraft types should have different or uniform applicable standards for defense systems.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs:

Primary Supported Enablers: EN-4602, EN-4610

PI-0072 Use of Unmanned Aircraft for Security Missions

Description: The use of Unmanned Aircraft Systems (UAS) will increase drastically in the near-term, according to most federal and private sources. Policy should be developed that established the requirements for UAS operations in the National Airspace System (NAS), the timeline for the integration of UAS into the national airspace system, and the establishment of separation standards and equipment requirements for UAS.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs: OI-4601

Primary Supported Enablers: EN-4601, EN-4600

Policy Issues

PI-0073 Frequency/Spectrum - Global Harmonization

Description: Develop streamlined US and international regulatory/policy coordination, through International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, for standards and compatibility requirements for frequency/spectrum equipment. Develop streamlined US and international regulatory/policy coordination among governments and within ICAO to manage standardization or compatibility changes in frequency/spectrum equipage requirements. This is meant to address foreign aircraft flying inside the national airspace system as well as domestic aircraft entering and exiting the National Airspace System (NAS). Policy recommendations need to be developed for US government coordination and support for future aviation spectrum requirements in the timeframe for future meetings of the International Telecommunication Union World Radio Communication Conference.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs:

Primary Supported Enablers: EN-1010

PI-0074 General Aviation Airport Security Requirements

Description: Policies should be developed to establish threat-dependent General Aviation (GA) airport security requirements.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs: OI-4201, OI-4203, OI-4600, OI-4601

Primary Supported Enablers: EN-4116, EN-4403, EN-4301, EN-4307

PI-0075 PNT Services - Global Harmonization

Description: Develop streamlined US and international regulatory/policy coordination, through International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, to allow for harmonized provision and use of Position, Navigation and Timing (PNT) services (based on Global Positioning Systems [GPS], Galileo, or other Global Navigation Satellite Systems [GNSS] technologies) as approved by states or delivered under contractual agreement/obligation. International harmonization of PNT services involves the use of the US GPS system by other states and the use of foreign GNSS systems by the US for air traffic operations. Under current international treaty, each state is responsible for PNT services in their airspace. A state can provide that service or approve a capability provided by another entity (such as the USG in the case of GPS). When approving a capability provided by another entity, a state can choose to approve it on its own or to contract the service to another entity. USG policy maintains that there is no need to change the international law in this respect; encourages states to approve the use of GPS without any specific contract; promotes acceptance of all available PNT signals; and promotes local monitoring of a given capability as sufficient to authorize its use where a state deems it necessary. To implement a global CAT I capability, the US either needs to provide transparency into the system design aspects that allow the approving state to conclude the system satisfies the requirements, or change USG law and policy to enter into a contract as a service provider and provide a "turn-key" system. The same could be said of US use of foreign GNSS systems. The Galileo model calls for providing a safety of life service for a fee. The US will have to decide to accept the free and open service of Galileo under the current GPS model, or enter into a contract to use the safety of life service. Embedded in this policy issue is the need for the US to decide what level of reliance it will allow when utilizing Galileo for safety critical applications.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs:

Primary Supported Enablers: EN-1040, EN-1041, EN-1042, EN-1044, EN-1501

Policy Issues

PI-0077 High Density Operations - Flight Prioritization

Description: Policies should be developed to set a construct or regime for prioritizing flights in congested operating environments. Air Traffic Services congestion management guidelines should be developed for use in algorithm design. Will prioritization of operations be based on factors other than aircraft operating characteristics, such as aircraft capacity, operator mission? Will market or other ranking mechanism apply? Policy should developed to determine the roles and responsibilities of various stakeholders in selecting among delay/gridlock mitigation options offered by the algorithms (e.g., which decisions should rest with the Air Navigation Service Providers [ANSP], airport operators, aircraft operators).

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2014

Primary Supported OIs: OI-0358, OI-0362, OI-0329, OI-0327, OI-0330, OI-0326, OI-0334, OI-0368, OI-0369, OI-0348, OI-0306, OI-0322

Primary Supported Enablers: EN-0018

PI-0079 Global Security

Description: Develop streamlined US and international regulatory/policy coordination, through International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, to ensure harmonization of US and foreign country security requirements. US laws require foreign airlines to adhere to the identical security measures as US airlines when flying to airports in the United States However, as a practical matter, this has not been enforced. As a result, there are differences between the security systems in foreign countries and those in the US. US airports are required to prescreen all international passengers, luggage, and cargo before entering the US Air Transportation System (ATS). This prescreening results in possible duplication of efforts, inefficiencies and security gaps.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs:

Primary Supported Enablers: EN-5028, EN-4113, EN-4310, EN-4311, EN-4114

PI-0080 Screening Requirement For Meeters And Greeters

Description: The decision should be made as to whether meeters and greeters should be able to enter/exit security check-points and, if so, what mechanisms should be used to screen them.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs:

Primary Supported Enablers: EN-4120, EN-4205

PI-0081 Perimeter Security

Description: Policies should be developed to establish mechanisms to ensure that airport perimeters are secure.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs:

Primary Supported Enablers: EN-4116, EN-4204, EN-4201

PI-0082 Oceanic Airspace Policy

Description: Develop streamlined US and international regulatory/policy coordination, through International Civil Aviation Organization (ICAO) Planning and Implementation Regional Group (PIRG) and/or other bilateral/multilateral agreements, to align treaty obligations and international processes for oceanic airspace with NextGen.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs: OI-0304

Primary Supported Enablers:

Policy Issues

PI-0086 Weather Information Policy - Global Harmonization

Description: Develop streamlined US and international standards and guidelines, through International Civil Aviation Organization (ICAO) and other international aviation, meteorological governing bodies, and bilateral/multilateral mechanisms regarding standards for weather information provided by all states. Weather information in the form of meteorological variables that are observed or forecasted (e.g., storm intensity, echo tops, etc.) must be translated into information that is directly relevant to NextGen users and service providers, such as the likelihood of a flight deviation, airspace permeability, and capacity. Global coordination is needed to establish common standards for weather information provided by all nations.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs:

Primary Supported Enablers: EN-2260, EN-2010, EN-2230, EN-2240

PI-0087 Weather Information Policy - Use of Single Authoritative Source in ATM Decisions

Description: Policy is necessary to designate the NextGen Four-Dimensional (4D) Weather Cube Single Authoritative Source (SAS) as a source of regulatory weather information for flight decision making. Today, there are policies in place governing the use of existing weather products in Air Traffic Management (ATM) decisions. In the NextGen timeframe, a policy regarding the operational use of 4D Weather Cube information must be established, as weather products are replaced with a SAS of weather information. In October 2007, the Joint Planning and Development Office (JPDO) Weather Policy Study Team found that the NextGen weather concept of a 4D Weather Cube SAS is equivalent to the weather information on which ATM decisions are based, therefore, this information must be sufficient to support all ATM decisions, and must be equally and readily available to all airspace participants under open and unrestricted data rights.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2009

Primary Supported OIs:

Primary Supported Enablers: EN-2010, EN-2060, EN-2080, EN-2270, EN-2410, EN-2420, EN-2430, EN-2260, EN-2440, EN-2470, EN-2700, EN-2710

PI-0088 Federal vs. Private Role In Weather Services

Description: NextGen envisions a single, authoritative source for aviation weather and a common weather picture for all air transportation users. Eventually this picture would be incorporated into decision support tools available to automation, controllers and pilots. Policy should be developed to determine the roles and responsibilities of government, private, and academic participants in the nation's weather enterprise to take full advantage of their capabilities to meet NextGen weather requirements.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2009

Primary Supported OIs: OI-2020

Primary Supported Enablers: EN-2710, EN-2700, EN-2270, EN-2260, EN-2040, EN-2050

PI-0089 Weather Avoidance Decision Making

Description: In the current Air Traffic Management (ATM) system, weather and hazardous weather information is provided by the controller to the pilot as advisory and on a "time available" basis. This contrasts with the authoritative role that the controller exercises in maintaining Instrument Flight Rule (IFR) aircraft separation. The pilot in command is responsible for keeping clear of weather hazards. In NextGen, an authoritative and common weather information source will be necessary to allow pilots, dispatchers, and Air Navigation Service Providers (ANSP) personnel to make collaborative strategic and tactical weather avoidance decisions. Such decisions must be made in the context of total ATM operations. Therefore, the NextGen roles and responsibilities of dispatchers, pilots, and ANSP personnel in providing, obtaining, and utilizing weather information need to be revisited.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs: OI-2020

Primary Supported Enablers: EN-2010, EN-2070, EN-2680

Policy Issues

PI-0091 Airport Worker Vetting

Description: Policies should be developed to mandate compliance with biometric standards and credentialing for airport workers with access to sterile and operations areas. Aviation security risks are mitigated by identifying and preventing aviation workers who are potential threats from gaining access to secure areas by credentialing or screening or other intervention.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs:

Primary Supported Enablers: EN-4204, EN-4201

PI-0092 Network-Enabled Aviation Safety Information Sharing Environment - Stakeholders

Description: Various issues must be addressed by a safety information Community Of Interest (COI) to include access to or exclusion from privileged, proprietary or confidential information; privacy; non-punitive/non-reprisal error and incident reporting; and protection from third-party liability. These policies are needed because today competitive, liability, and privacy concerns discourage stakeholders in the private sector and state and local government from sharing helpful aviation safety information. Establishing such policies would enable community wide information to support migration from the current historic (accident) analysis to diagnostic and prognostic analyses that use system-wide safety information sources. New policy is needed to establish procedures for sharing aviation safety information among government agencies, state and local governments, and the private sector.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs:

Primary Supported Enablers: EN-3037

PI-0094 Aviation Safety - Global Harmonization

Description: Develop streamlined US and international aviation safety regulations, procedures and supporting systems, through the International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, for alignment and compatibility among regional/national Safety Management Systems (SMS) , including promotion of a global safety culture, and implementation of consistent technologies and standards.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2016

Primary Supported OIs:

Primary Supported Enablers: EN-3116

PI-0095 National Security Policies for Passenger and Cargo Screening

Description: Establish national policies and performance standards for the physical screening of passengers, baggage, cargo, and mail.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs:

Primary Supported Enablers: EN-4114, EN-4107, EN-4109, EN-4106, EN-4118, EN-4116, EN-4108, EN-4311, EN-4312, EN-4301, EN-4302, EN-4307, EN-4113, EN-4310

PI-0096 Security Financing Responsibility for Passenger and Cargo Screening

Description: Establish national financing responsibilities for the infrastructure, facilities, and resources to conduct physical security screening of passengers, baggage, cargo, and mail.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs:

Primary Supported Enablers: EN-4107, EN-4109, EN-4106, EN-4118, EN-4108, EN-4208, EN-4312, EN-4301, EN-4302, EN-4307, EN-4311, EN-4310

Policy Issues

PI-0097 Airport Emergency Response

Description: Policies should be developed to establish airport emergency response protocols, policies, procedures, and information sharing requirements.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs:

Primary Supported Enablers: EN-4206

PI-0098 Non-Cooperative Target Support

Description: Policies should be developed to determine responsibility for funding, support, and operational responsibility for detection and tracking of non-cooperative targets.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs:

Primary Supported Enablers: EN-4500, EN-1003

PI-0099 Air Cargo and Mail Security Requirements

Description: Policies should be developed to establish screening performance requirements for air cargo and mail. The air shipping process includes prevention, detection, and mitigation measures to reduce the likelihood of cargo and mail from being used as a threat endangering aircraft, aviation facilities and people. Air cargo and mail policies outline the screening requirements of cargo for Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) be done by the shipper or other third parties prior to entering the Air Transportation System (ATS). Policy questions to be answered include the following: Will the Trusted Shipper program be domestic only or will it include international points of origin? Who will certify compliance with standards and where will such standards be established? How and to what degree will information (e.g., manifests, content, points of origin, destination, shipper) be shared among relevant agencies? What threats will be screened for (e.g., CBRNE)?

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs: OI-4203

Primary Supported Enablers: EN-4403, EN-4312, EN-4301, EN-4302, EN-4307, EN-4310, EN-4311

PI-0100 Certified Supply Chain Entity (CSCE)

Description: Policies should be developed to establish the national Certified Supply Chain Entity (CSCE) program policies, procedures, and credentialing.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2013

Primary Supported OIs: OI-4401

Primary Supported Enablers: EN-4401

PI-0101 Initial Aviation Environmental Policy

Description: A initial aviation environmental policy should be developed to provide high-level direction for addressing the aviation environmental impacts of primary concern for NextGen. To date, the Federal Aviation Administration (FAA) has issued an aviation noise policy but has not issued a comprehensive policy that includes other environmental impacts of primary concern (air quality, water quality, and climate change). An inclusive and comprehensive policy is needed that addresses all major aviation impacts, including their interrelationships with each other and with aviation energy use.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs: OI-6014

Primary Supported Enablers: EN-6000, EN-6001, EN-6013

Policy Issues

PI-0102 Initial NextGen Long-Term Environmental Goals and Targets

Description: Policy is needed to establish NextGen initial environmental protection goals for community noise, air quality, airport water quality, and global climate change impacts. Climate change is an emerging area that poses significant challenges. Adequate measures to address and effectively mitigate aviation's contribution will be critical for aviation growth. The environmental protection goals will be based on best available scientific knowledge of aviation's impacts and should be established for reducing impacts to levels that will sustain air transportation growth. Setting goals up front and refining them over time are key to achieving the capacity and environmental goals of NextGen. Resolution will include an evolving set of targets which would be refined to adapt to increased scientific knowledge, changing environmental protection needs, and technological and operational capabilities.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs: OI-6014

Primary Supported Enablers: EN-6006, EN-6001, EN-6012, EN-6024, EN-6022, EN-6023, EN-6038, EN-6013

PI-0103 Refined Aviation Environmental Policy

Description: Refinements are made to the initial aviation environmental policy, where necessary, to address advances in environmental protection data and capabilities, and achieve the capacity and environmental goals of NextGen. A second generation policy is informed by improved scientific understanding, enhanced metrics, and advanced aviation noise and emissions modeling capabilities. It would reflect and incorporate refinements to NextGen long term environmental targets and continue to address all major aviation impacts, including their interrelationships with each other and with aviation energy use.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs: OI-6020

Primary Supported Enablers:

PI-0104 Initial EMS Approach

Description: An initial systematic environmental management approach for achieving NextGen goals is needed. Policy is needed to establish a national framework for developing and applying an Environmental Management System (EMS) approach to achieve NextGen environmental protection goals. An EMS is intended to ensure that necessary actions are taken to integrate environmental accountability into day to day decision making and longer term planning processes. An EMS will employ a monitoring cycle for continual improvement of environmental performance. The EMS framework will be developed to provide a self correcting feedback cycle that systematically identifies, manages, monitors, and adapts to the environmental demands of the NextGen high volume and dynamic nature.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs: OI-6014

Primary Supported Enablers: EN-6013, EN-6002, EN-6016, EN-6000

PI-0105 Refined NextGen Long-Term Environmental Targets

Description: Refined policy is developed to reflect improvements to metrics and scientific understanding regarding NextGen environmental protection goals. The environmental protection targets will be revised based on best available scientific knowledge of aviation's impacts and should be established for reducing impacts to levels that will sustain air transportation growth. The policy would continue the process of refining initial targets and respond to knowledge obtained from first generation integrated environmental models. Resolution will include an evolved set of goals which would be refined from initial observations to address changing environmental protection needs, technological and operational capabilities.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs: OI-6020

Primary Supported Enablers: EN-6041, EN-6011, EN-6033, EN-6034, EN-6047, EN-6027, EN-6032, EN-6039, EN-6053, EN-6054

Policy Issues

PI-0106 Evolved EMS Approach

Description: The systematic environmental management approach for achieving NextGen goals evolves to include additional aviation organizations and any needed refinements. A long term outreach program encourages the adoption and implementation of an Environmental Emergency System (EMS) approach to achieve NextGen environmental goals by all aviation organizations in the US. The approach is refined with second generation environmental protection targets, enhanced metrics, advanced aviation noise, and emissions modeling capabilities.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs: OI-6020

Primary Supported Enablers: EN-6041, EN-6027

PI-0107 Intermodal Safety Management Integration

Description: A significant point of aviation safety risk is transfer of hazardous cargo between modes of transportation (i.e., surface or maritime to air, and vice versa) particularly when rules, procedures, and warning signs/placards are inconsistent between modes. Reducing material transport handling hazards across transportation modal boundaries can be accomplished by increasing standardized packaging of hazardous materials across transportation modes. The development of regulations, procedures and controls for materials transiting between the various components and external infrastructures will reduce the number of hazardous materials releases related to intermodal incidents and accidents. Safety Management Systems (SMS) are one of the methodologies that can and should be transferred to other modes to allow alignment across modes on a national and global scale. Sharing best practices and increased collaboration will result in cross-modal policies allowing greater alignment and integration.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs:

Primary Supported Enablers: EN-3030

PI-0108 Certifying Use of Net-Centric Information

Description: Policies and procedures must be developed for approving operating procedures based on information derived from non-government sources. Today, air traffic operations are based entirely upon information generated and controlled by trusted government entities. These policies and procedures are needed because NextGen operators will be using information derived from a network of sources, including private sector vendors and stakeholders. To the extent that net-derived data and information is critical to safe operations, policies, and procedures that must be developed for evaluating and certifying the trustworthiness, accuracy, and integrity of the source and information for operational applications.

SOPR: DOD ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs: OI-0331, OI-0358, OI-0320, OI-0346, OI-5009, OI-5011

Primary Supported Enablers: EN-3016, EN-3018, EN-4210, EN-1015, EN-1016, EN-3119, EN-1043, EN-0005, EN-0006

PI-0109 Environmental Technologies Development

Description: Policies should be developed to guide sufficient technology development, and to facilitate or incentivize its timely introduction into the fleet. Such policies are intended to allow an increase in capacity while producing an absolute reduction in significant levels of aviation noise and air quality emissions, so as to remove environment as a constraint on capacity. Policies should explore additional funding for technology development and maturation, including alternative fuels, as well as incentives to achieve fleet insertion.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2012

Primary Supported OIs: OI-6017, OI-6012

Primary Supported Enablers: EN-6007, EN-6051

Policy Issues

PI-0110 International Commercial Space Operations

Description: Policy mechanisms need to be developed to ensure that US commercial space operations are allowed to depart from US spaceports and land in spaceports located in foreign countries. These policies should ensure that launches originating in foreign countries and destined for the US do not pose public safety or national security risks.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs: OI-0349

Primary Supported Enablers: EN-0301, EN-4510

PI-0111 Airport Security Governance

Description: Policy should be developed to answer the following questions: Who determines types of security systems to be installed at airports? Who decides what airport-related security information should be shared, with whom and when? Who bears the responsibility for reconfiguring airports to accommodate that system? Who bears the cost for the system, its associated infrastructure and any required airport modifications? Currently, public/private information sharing is mostly done verbally without automation support. Decisions about the installation and implementation of security systems in airport terminals are negotiated between the airport and the Transportation Security Administration (TSA) on a case-by-case basis. The lines of decision-making authority and funding responsibilities are unclear. While this approach seems to have worked up to this point, there is no assurance that this approach will continue to work in the future as new threats arise or passenger numbers significantly increase.

SOPR: DHS ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs: OI-4101, OI-4103, OI-4105, OI-4204, OI-4401, OI-4201, OI-4203, OI-4400, OI-4300

Primary Supported Enablers:

PI-0112 Dynamic Environmental Management Systems Approach

Description: Highly sophisticated environmental management systems, with efficient and effective communication networks, dynamically manage NextGen environmental impacts. Advances in science, technologies, fuels, and operational procedures provide improvements in available strategies to improve environmental performance.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2015

Primary Supported OIs: OI-6021, OI-6022

Primary Supported Enablers: EN-6030, EN-6043, EN-6045, EN-6042, EN-6018

PI-0113 Environmental Impact Modeling and Assessment

Description: Develop policies on the application and integration into Federal Aviation Administration (FAA) programs of first generation environmental models that integrate aviation noise and emissions are linked with operational models and provide information on environmental tradeoffs.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2011

Primary Supported OIs: OI-6020

Primary Supported Enablers: EN-6011, EN-6047

Policy Issues

PI-0114 Environmental Standards - Global Harmonization

Description: US efforts will be needed to foster international standards, recommended practices, and guidance that are technically feasible, economically reasonable, provide a measurable benefit, consider interdependencies between various emissions and between emissions and noise, and that complement national NextGen efforts. Key issues include addressing climate impacts, use of new tools for evaluating potential oxides of nitrogen stringency, and the use and promotion of Environmental Management Systems (EMS) internationally. Global harmonization of standards, practices, and guidance will be revisited every three years in accordance with the work program cycle of the International Civil Aviation Organization (ICAO) Committee on Aviation Environmental Protection (CAEP).

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs:

Primary Supported Enablers: EN-6004, EN-6007, EN-6008, EN-6011, EN-6027, EN-6032, EN-6033, EN-6041, EN-6046, EN-6047, EN-6053, EN-6005, EN-6034, EN-6050

PI-0115 NextGen Safety Assessment/Certification - Synchronization of Aircraft and ANS Capabilities

Description: The aircraft and Air Navigation Service Provider (ANSP) systems envisioned for NextGen are technically innovative, highly sophisticated, and interdependent. Many NextGen improvements require the synchronized implementation of these interdependent and integrated yet separate aircraft and ANSP systems. To support the most efficient implementation of these improvements yet address all safety issues, NextGen operational improvements should be assessed as integrated capabilities. A system safety approach should be used that considers elements such as procedures, backup capabilities and the interrelationships of all systems used to accomplish the operational improvement. Rather than separate assessments and certification of individual systems, the safety assessment and certification process will include an approach incorporating the integrated use of aircraft and ANSP systems.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs: OI-0322, OI-0334, OI-0360, OI-0349, OI-0409, OI-0410

Primary Supported Enablers: EN-0031, EN-0032, EN-0103, EN-1007, EN-0109, EN-1023, EN-1202, EN-1400, EN-0028, EN-0102, EN-0106

PI-0116 NextGen Safety Assessment/Certification - Standards and Tools

Description: The systems envisioned for NextGen will be technically innovative and highly sophisticated, permitting aircraft to operate in new and more flexible ways, and resulting in changing roles for operators. New safety assessment standards, methodologies, and verification and validation tools must be developed for application to NextGen capabilities and requirements that cannot be adequately assessed through existing processes. Techniques and technologies to identify emergent risks must be developed.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs: OI-0349, OI-0334, OI-0322, OI-0360, OI-0409, OI-0410

Primary Supported Enablers: EN-0031, EN-0103, EN-1023, EN-0102, EN-0032, EN-0109, EN-1007, EN-1202

PI-0117 NextGen Safety Assessment/Certification - Resources

Description: The aircraft and Air Navigation System (ANS) envisioned for NextGen will be technically innovative and highly sophisticated. The diversity, complexity, and volume of systems and equipment being considered for safety approval/certification in NextGen will increase dramatically over what is experienced today. Adequate levels and appropriately skilled resources (e.g., human evaluators) and tools must be developed and applied to NextGen requirements setting, standards setting, system engineering, implementation, and safety assessment/certification requirements so that approvals can keep pace with deployment schedules. Research into the certification processes for complex systems may be required.

SOPR: FAA ***SOCR:*** ***Initial Decision:*** 2010

Primary Supported OIs: OI-0322, OI-0334, OI-0360, OI-0410, OI-0409

Primary Supported Enablers: EN-0031, EN-0103, EN-1007, EN-0102, EN-0032, EN-0109, EN-1023, EN-1202

Policy Issues

PI-0120 PNT Performance Requirements

Description: Develop policy to determine which backup Position, Navigation and Timing (PNT) services constitutes "critical" aviation infrastructure applications according to Presidential directive. Current Presidential policy states, "In coordination with the Secretary of Homeland Security, develop, acquire, operate, and maintain backup position, navigation, and timing capabilities that can support critical transportation, homeland security, and other critical civil and commercial infrastructure applications within the United States, in the event of a disruption of the Global Positioning System (GPS) or other space-based PNT services...." Moreover, develop streamlined US and international regulatory/policy coordination, through the International Civil Aviation Organization (ICAO) and/or other bilateral/multilateral partnerships, in order to manage standardization and/or compatibility changes in PNT performance requirements. This is meant to address domestic and foreign aircraft within US airspace and across international airspace boundaries. (e.g., Performance requirements for Required Navigation Performance [RNP] 0.1 should be consistent among states and operational approval in one state should be accepted by other states; the same should be true for Automatic Dependent Surveillance-Broadcast [ADS-B] performance requirements.)

SOPR: DOD ***SOCR:*** ***Initial Decision:*** 2008

Primary Supported OIs: OI-0326, OI-0330, OI-0334, OI-0338, OI-0341, OI-0317, OI-0355, OI-0409, OI-0410, OI-0369, OI-0347, OI-0343, OI-0359, OI-0362, OI-0363, OI-0340, OI-0311, OI-0333, OI-0348

Primary Supported Enablers: EN-1400, EN-5043, EN-1144, EN-1006, EN-1143, EN-1120, EN-1041, EN-1040, EN-1044, EN-1023, EN-1404, EN-1405, EN-1005, EN-1022, EN-1025, EN-1402, EN-1510, EN-1060, EN-0201, EN-1101, EN-1042

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